BP-16 Rates Workshop

Transmission Topics

August 13, 2014

Agenda

- Segmentation Follow-Up
- Revenue Requirement
- Cost Allocation-Tacoma Presentation
- Southern Intertie LT- Transalta
- Southern Intertie Hourly Non-Firm Issue
- Next Steps

BP-16 Rate Case Proposed Schedule

- November 5 – Federal Register notice published
- November 12 – Prehearing Conference/BPA Direct Case

- Nov 27 – 30 – Clarification of BPA's Direct Case
- Jan 30 – Parties File Direct Cases
- Mar 12 – Litigants File Rebuttal Cases
- Apr 1-3 and 6-7 – Cross-exam
- May 1 – Initial Briefs
- May 8 – Oral Argument
- Jun 12 – Draft ROD
- Jul 1 – Briefs on Exceptions
- Jul 24 – Final ROD

Segmentation Follow-Up

What is Segmentation?

- Segmentation is a categorization of BPA's transmission assets into groups (called segments) to develop allocation factors based on gross investment and historical operations and maintenance (O&M). These allocation factors are then used to assign the total transmission revenue requirement to the various segments and thereby allow rates for the use of each segment to be calculated.

Segments	Corresponding Rates
Network	PTP, NT, IR, FPT
Utility Delivery	UDC
Industrial Delivery	UFT
Southern Intertie	IS
Eastern Intertie	IE, IM, TGT
Generation-Integration	Assigned to power rates
Ancillary Services	ACS

How Is Segmentation Used?

- Segmented plant investment and segmented historical O&M are used for allocating costs in the transmission revenue requirement.
- Segmented plant investment, expanded by future plant in service projections, determines average investment in each rate year, which is the allocator for:
  - Transmission line and substation depreciation
  - Net interest expense
  - Planned net revenue
- Segmented historical O&M costs is the allocator for:
  - O&M costs during the rate period
  - Overhead expenses
  - General plant depreciation

History of Segmentation

- 1974: Transmission System Act – excess transmission available to all utilities on a fair and nondiscriminatory basis.
- Prior to 1974 – many transmission contracts based on either Formula Power or use of facilities construct.
  - Based on categorization of facilities—lines, terminals, transformation
  - Average costs of facilities in each category
  - Use of each category by contract
  - Basis for initial Formula Power Transmission (FPT) rate in 1958
- 1979: first segmentation study – identification of nine major segments for power rate case.
  - Three applied to non-Federal transmission – integrated network, southern intertie, eastern intertie, plus a fourth in 1983: northern intertie
  - Five included (bundled) in power rates – generation integration, fringe area, preference and federal agency delivery, DSI delivery, IOU delivery (shares of other segments also bundled)
  - 1981: Additional breakdown of network facilities was used for FPT rate components

History of Segmentation (cont.)

- 1996 Segmentation:
  - OATT service introduced - separation of power and transmission business lines
  - eliminated Fringe, IOU Delivery, and Northern Intertie segments
  - more narrowly defined and un-bundled delivery segments
- 2001 segmentation added the Ancillary Services segment.
- 2008 segmentation analysis was simplified by assigning all transmission investment costs for ancillary services to the Scheduling, Control, and Dispatch (SCD) and Generation Supplied Reactive (GSR) rates, and the remaining cost-based ancillary and control area service rates were based entirely on their respective generation input costs.

Segmentation Review Process

- In BP-14, BPA committed to review its segmentation policies in a public review
  - Public process began in January 2014 and concluded with a White Paper in July 2014 (July 3 posting to BP-16 Meetings) http://www.bpa.gov/Finance/RateCases/BP-16/Pages/Meetings-Workshops.aspx
  - BPA reviewed six participant-submitted alternative segmentation methodologies on the Network and Utility Delivery segments and one participant-submitted alternative for the Montana Intertie
  - Results of the review are being used in formulating the BP-16 Initial Proposal
- Alternative methodologies examined differing approaches to segmentation
- Alternatives presented a range of options from moving more towards cost-of-service ratemaking to moving more towards uniform rates
- BPA appreciates the hard work put in by participants to offer alternatives and comments for our consideration in preparing the BP-16 Initial Proposal

BP-16 Network and Delivery Segmentation

- BPA has chosen to maintain the Network and Delivery segments in the Initial Proposal
  - Will maintain BP-14 proposal of increasing Delivery rates at 25% in BP-16
- Meets the principle of uniform rates for services on BPA's Network
- Meets the principle of promoting wide-spread use of electric power in the Pacific Northwest
- Meets the principle of rate stability
- Meets the principle of a cost causation approach to Network and Delivery service

BP-16 Network Segmentation

- BPA believes that most parties generally accept BPA's current application of the Direct Assignment Guidelines which are used to decide which facilities are funded by BPA and which are funded by customers
  - The Direct Assignment Guidelines began to be formulated in 1998 and had several modifications through 2004
  - If facilities are funded by BPA, they are included in the Network segment
  - Participants are invited to offer suggestions for modifying the Guidelines
  - As modifications are suggested, future rate case workshops will be used to discuss such suggestions
- The Guidelines (as they may be modified) serve as a useful benchmark for determining which new facilities would be included in the network segment

BP-16 Network Segmentation (cont.)

- For segmentation purposes, applying the Guidelines to facilities existing prior to their formation is difficult
  - Not all relevant facts are known today – e.g., were there particular understandings between BPA and the customer?
  - The facility configurations that exist today may not have been present when decisions were made
- Relatively few network segment facilities appear to meet today's Guidelines for assigning the costs to the customer (roughly 1-to-3 percent of the Network segment revenue requirement). As stated above, BPA lacks critical knowledge of the factors used for past decisions and will not be removing these from the network in its Initial Proposal.
- In BP-16, BPA will propose a network segment definition that is consistent with the principles established in the Direct Assignment Guidelines

BP-16 Eastern Intertie Segmentation

- BPA considered a Gaelectric proposal to roll the Eastern Intertie segment into the Network segment
- BPA will maintain the Eastern Intertie segment in its initial proposal because the Eastern Intertie was constructed to interconnect resources in eastern Montana into BPA's network.
- Maintains parallel treatment with other facilities that interconnect generation, including the Generation Integration segment used to integrate federal generation.

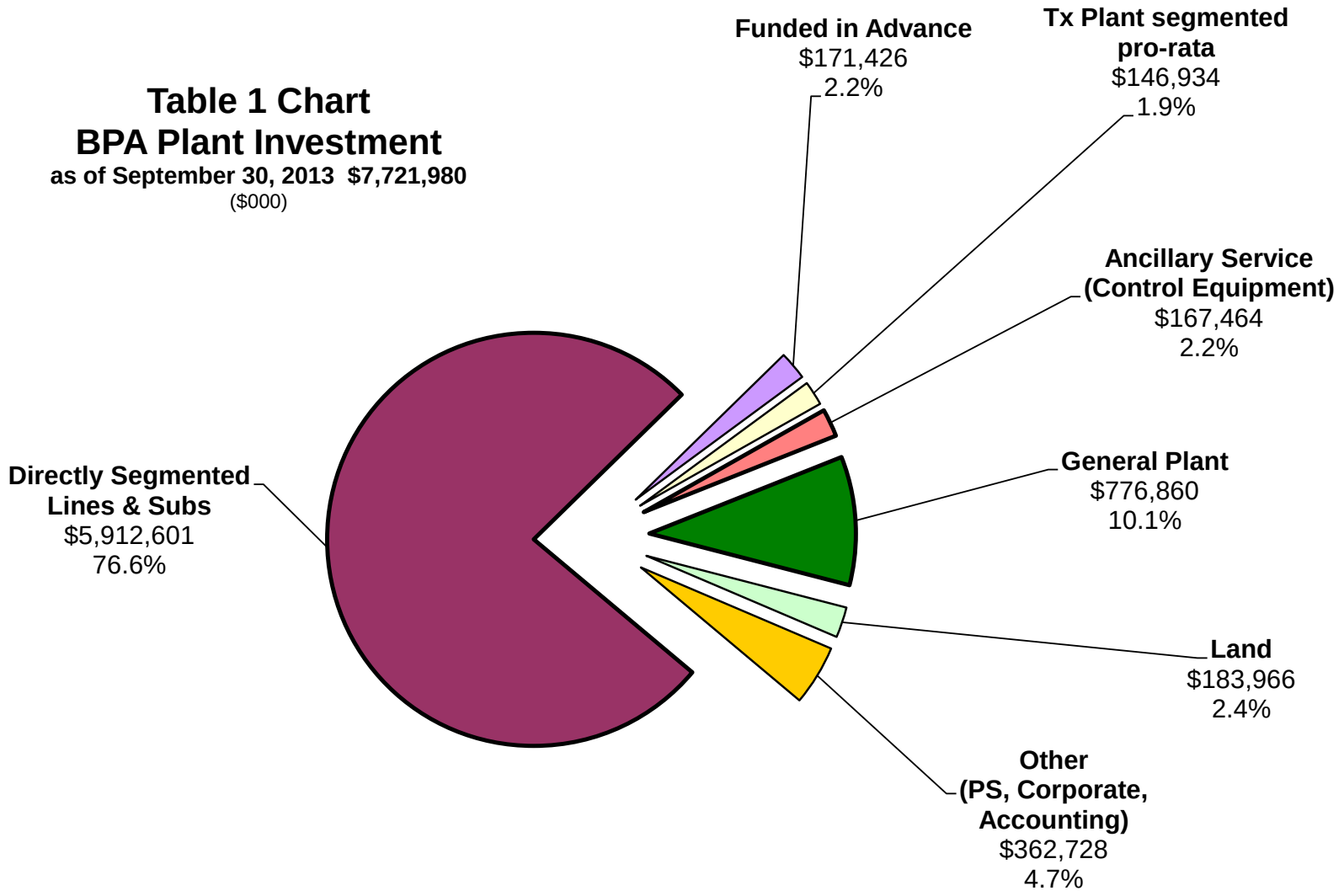
Description of BP-16 Segments

- Generation Integration – transmission facilities to connect federal generation to network facilities.
- Network – transmission facilities that provide interconnections between other segments and/or customers' transmission facilities.
- Southern Intertie – transmission facilities connecting network facilities in the PNW to California.
- Eastern Intertie – transmission facilities connecting network facilities in the PNW to Eastern Montana, primarily to transfer energy from Colstrip to the PNW.
- Utility Delivery – transmission facilities that connect network facilities to utility customers' distribution systems.
- DSI Delivery – transmission facilities that connect network facilities to DSI customers at lower voltages.
- Ancillary Service – communications and control equipment. Also, the cost of generation inputs (from FCRPS) to provide ancillary and control area services is allocated to the Ancillary Services segment.

BP-16 Segmentation – O&M

- BPA reviewed its segmentation of historical O&M and will propose some changes as follows:
  - Use a 7 year rather than a 3 year average
  - Allocate non-direct O&M to Lines, Substations, and Metering stations and segment in proportion to the direct O&M in each respective group
  - Allocate Transmission Line and Right-of-way Maintenance and Vegetation Management (all non-direct) to Lines only

BP 16 Study - Investment Summary



Segmented Lines and Subs

($000)

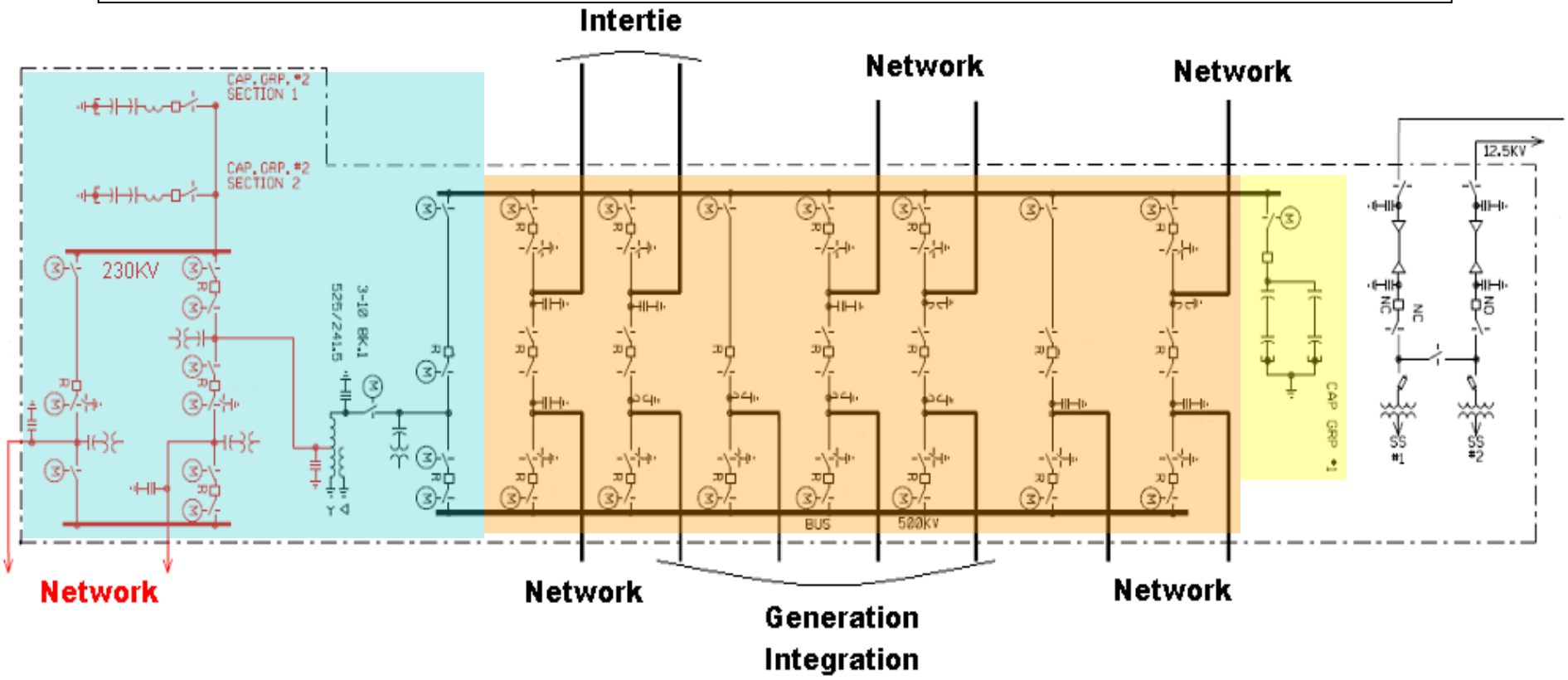
	A	B	C	D	E	F	G	H	I
		Generation Integration	Network	Southern Intertie	Eastern Intertie	Utility Delivery	DSI Delivery	Total	Ancillary Services
	Plant Investment through FY 2009 (From Sep 15, 2010 Workshop - Preliminary)								
1	Stations	43,204	1,899,155	498,066	23,866	24,876	15,557	**2,504,725**	
2	Lines	18,332	2,046,410	187,084	94,271	642	-	**2,346,739**	
3	**SubTotal**	**61,536**	**3,945,565**	**685,150**	**118,137**	**25,518**	**15,557**	**4,851,464**	**586,399**
4	% of Total	1.3%	81.3%	14.1%	2.4%	0.5%	0.3%	100.0%	
	Plant Investment through FY 2012 (BP14 Final Segmentation Study)								
5	Stations	61,074	2,275,531	616,962	25,258	30,500	27,326	**3,036,649**	
6	Lines	18,657	2,467,028	199,264	94,882	48	-	**2,779,880**	
7	**SubTotal**	**79,731**	**4,742,559**	**816,226**	**120,140**	**30,547**	**27,326**	**5,816,529**	**163,817**
8	% of Total	1.4%	81.5%	14.0%	2.1%	0.5%	0.5%	100.0%	
	Plant Investment through FY 2013 (Preliminary - Subject to review)								
9	Stations	64,328	2,454,439	620,569	25,416	27,959	27,284	**3,219,994**	
10	Lines	17,986	2,515,076	199,250	94,871	48	-	**2,827,230**	
11	**SubTotal**	**82,313**	**4,969,514**	**819,819**	**120,287**	**28,007**	**27,284**	**6,047,224**	**167,464**
12	% of Total	1.4%	82.2%	13.6%	2.0%	0.5%	0.5%	100.0%	

Multi-Segmented Facilities

1. Directly assign equipment investment to each segment based on equipment utilization.
2. Allocate investment to multiple segments based on contractual assignment of investment.
3. Proportionally allocate total investment according to major equipment assignment.
   - Identify investment in major equipment by class (either voltage level or specific use).
   - Allocate station general (non-major) equipment by proportion of investment in each class.
   - Identify # terminals (interconnections) within each class that support each segment.
   - Allocate class investment to each segment in proportion to the number of allocated terminals.

Multi-Segment Allocation Example

Assumptions:
- 230 kV equipment is all Network
- Compensation equipment is all Intertie
- 500 kV equipment is shared by terminal count
- Station Service is non-major equipment



Multi-Segment Allocation (cont.)

Total Investment	**35,000,000.00**			
Major Equipment	Investment	%	Non-major Allocation	Total
230kV Major Eqpt	3,250,000.00	18.3%	3,169,300.23	6,419,300.23
500kV Major Eqpt	11,350,000.00	64.1%	11,068,171.56	22,418,171.56
500kV Comp Eqpt	3,120,000.00	17.6%	3,042,528.22	6,162,528.22
Total	**17,720,000.00**		**17,280,000.00**	**35,000,000.00**
Non-major Eqpt	17,280,000.00			
			Total 500 kV Terminals	12

Generation Integration	4	terminals	**Total GI**	**7,472,723.85**
				21.4%
Southern Intertie	2	terminals	**Total Intertie**	**9,898,890.14**
		plus Compensation Eqpt		**28.3%**
Network	6	terminals	**Total Network**	**17,628,386.00**
		plus 230kV Eqpt		**50.4%**

BP 16 Study - Future Plant in Service

($000)

	A	B	C	D	E	F	G	H
		Generation Integration	Network	Southern Intertie	Eastern Intertie	Utility Delivery	DSI Delivery	Total
1	**Stations**							
2	FY 2014	-	166,711	14,858	145	117	-	**181,831**
3	FY 2015	-	185,004	26,797	208	54	-	**212,064**
4	FY 2016	-	241,608	23,593	91	63	-	**265,355**
4	FY 2017	-	177,918	288,417	87	46	-	**466,468**
5	**Lines**							
6	FY 2014	-	97,992	3,129	-	-	-	**101,121**
7	FY 2015	-	147,123	1,762	-	-	-	**148,886**
8	FY 2016	-	182,584	1,754	-	-	-	**184,339**
4	FY 2017	-	129,702	34,336	-	-	-	**164,038**
9	**Lines & Subs**							
10	FY 2014	-	264,704	17,987	145	117	-	**282,952**
11	FY 2015	-	332,127	28,560	208	54	-	**360,950**
12	FY 2016	-	424,192	25,347	91	63	-	**449,694**
4	FY 2017	-	307,620	322,753	87	46	-	**630,506**

		Ancillary Services	General Plant
13	**Other**		
14	FY 2014	66,585	101,415
15	FY 2015	52,109	116,239
16	FY 2016	64,789	118,691
16	FY 2017	40,038	119,561

Data derived from Capital Investment Review (CIR) process, and subject to change in the Integrated Program Review (IPR) process.

Segmented Historical O&M

($000)

	A	B	C	D	E	F	G	H	I	J
		Generation Integration	**Network**	**Southern Intertie**	**Eastern Intertie**	**Utility Delivery**	**DSI Delivery**	**Total**	**Ancillary Services**	**Overhead**
	Historical O&M FY 2007 through FY 2009 (preliminary 2012 rate case)									
1	Stations	1,126	44,236	10,242	316	1,341	1,541	**58,802**		
2	Lines	401	50,991	2,926	621	13	-	**54,951**		
3	**SubTotal**	**1,527**	**95,227**	**13,167**	**937**	**1,353**	**1,541**	**113,753**		
4	% of Total	1.3%	83.7%	11.6%	0.8%	1.2%	1.4%	100.0%		
	Historical O&M FY 2009 through FY 2011 (BP14 Final Segmentation Study)									
5	Stations	2,937	98,654	18,869	615	2,145	1,140	**124,359**		
6	Lines	217	24,856	1,455	181	4	-	**26,713**		
7	**SubTotal**	**3,154**	**123,510**	**20,323**	**796**	**2,149**	**1,140**	**151,072**	**45,337**	**45,945**
8	% of Total	2.1%	81.8%	13.5%	0.5%	1.4%	0.8%	100.0%		
	Historical O&M FY 2007 through FY 2013 (7 years; Preliminary BP16 Initial Proposal; subject to review)									
9	Stations	2,376	76,118	15,101	502	1,698	1,171	**96,966**		
10	Lines	416	43,987	2,701	393	9	-	**47,505**		
11	**SubTotal**	**2,792**	**120,104**	**17,802**	**895**	**1,707**	**1,171**	**144,472**	**43,202**	**42,168**
12	% of Total	1.9%	83.1%	12.3%	0.6%	1.2%	0.8%	100.0%		

Revenue Requirement

Assumptions

- The BP-16 initial proposal will include:
  - Program costs consistent with the Integrated Program Review (IPR) close out report
  - Capital investments consistent with the Capital in Review (CIR) close out
  - Financing all BPA capital investments with Treasury bonds
  - All completed Federal transactions through July 2014
  - All completed master lease transactions through July 2014
  - Financing of all BPA capital investments with Treasury bonds except for $15 million per year funded with financial reserves available for risk attributed to Transmission
  - Fine tuning to ensure consistency with other studies and forecasts such as generation inputs and LGIA credits
- The following tables are consistent with analysis for the IPR initial publication and do no reflect the final IPR amounts.

Preliminary Income Statement

		A	B	C	D
		FY 2016	FY 2017	AVERAGE	BP-14 AVERAGE
1	OPERATING EXPENSES				
2	TRANSMISSION OPERATIONS	150,932	156,458	153,695	142,538
3	TRANSMISSION ENGINEERING	48,746	49,147	48,946	41,704
4	TRANSMISSION MAINTENANCE	162,552	164,272	163,412	156,064
5	TRANSMISSION ACQUISITION & ANCILLARY SERVICES	142,694	148,971	145,832	125,473
6	BPA INTERNAL SUPPORT	85,106	86,915	86,010	79,665
7	OTHER INCOME, EXPENSES & ADJUSTMENTS	(2,100)	(2,100)	(2,100)	(20,000)
8	DEPRECIATION & AMORTIZATION	233,545	250,423	241,984	197,303
9	TOTAL OPERATING EXPENSES	821,474	854,086	837,780	722,745
10	INTEREST EXPENSE				
11	INTEREST EXPENSE				
12	FEDERAL APPROPRIATIONS	14,091	10,078	12,084	14,235
13	CAPITALIZATION ADJUSTMENT	(18,968)	(18,968)	(18,968)	(18,968)
14	ON LONG-TERM DEBT	122,496	149,140	135,818	122,446
15	AMORTIZATION OF CAPITALIZED BOND PREMIUMS	561	561	561	561
16	DEBT SERVICE REASSIGNMENT INTEREST	31,431	23,072	27,251	40,560
17	NON-FEDERAL INTEREST	48,913	50,282	49,597	45,669
18	PREMIUMS/DISCOUNTS	-	(2)	(1)	-
19	AFUDC	(21,518)	(17,416)	(19,467)	(37,855)
20	INTEREST INCOME	(11,485)	(17,178)	(14,332)	(11,897)
21	NET INTEREST EXPENSE	165,520	179,568	172,544	154,751
22	TOTAL EXPENSES	986,994	1,033,653	1,010,324	877,496
23	MINIMUM REQUIRED NET REVENUE 1/	108,865	86,192	97,529	136,085
24	PLANNED NET REVENUES FOR RISK	-	-	-	-
25	TOTAL PLANNED NET REVENUE	108,865	86,192	97,529	136,085
26	**TOTAL REVENUE REQUIREMENT**	**1,095,859**	**1,119,845**	**1,107,852**	**1,013,581**

Preliminary Statement of Cash Flows

		A	B	C	D
		FY 2016	FY 2017	AVERAGE	BP-14 AVERAGE
1	CASH FROM CURRENT OPERATIONS:				
2	MINIMUM REQUIRED NET REVENUE	108,865	86,192	97,529	136,085
3	DRAWDOWN OF CASH RESERVES FOR CAPITAL FUNDING	15,000	15,000	15,000	15,000
5	EXPENSES NOT REQUIRING CASH:				
6	DEPRECIATION & AMORTIZATION	233,545	250,423	241,984	197,303
7	TRANSMISSION CREDIT PROJECTS NET INTEREST	5,196	5,629	5,413	2,289
8	AMORTIZATION OF CAPITALIZED BOND PREMIUMS	561	561	561	561
9	CAPITALIZATION ADJUSTMENT	(18,968)	(18,968)	(18,968)	(18,968)
10	NON-CASH REVENUES/ACCRUAL REVENUES				
11	LGIA	(37,933)	(27,575)	(32,754)	(41,762)
12	AC INTERTIE CO/FIBER	(6,853)	(6,853)	(6,853)	(6,583)
13	CASH PROVIDED BY CURRENT OPERATIONS	299,414	304,409	301,911	283,926
13	CASH USED FOR CAPITAL INVESTMENTS:				
14	INVESTMENT IN:				
15	UTILITY PLANT	(658,667)	(576,229)	(617,448)	(651,114)
16	CASH USED FOR CAPITAL INVESTMENTS	(658,667)	(576,229)	(617,448)	(651,114)
17	CASH FROM TREASURY BORROWING AND APPROPRIATIONS:				
18	INCREASE IN LONG-TERM DEBT	643,667	561,229	602,448	636,114
19	DEBT SERVICE REASSIGNMENT PRINCIPAL	(185,303)	(199,991)	(192,647)	(180,133)
20	REPAYMENT OF CAPITAL LEASES	(1,392)	(1,486)	(1,439)	(1,258)
21	REPAYMENT OF LONG-TERM DEBT	(42,371)	(51,882)	(47,127)	(36,525)
22	REPAYMENT OF CAPITAL APPROPRIATIONS	(55,347)	(36,051)	(45,699)	(51,010)
23	CASH FROM TREASURY BORROWING AND APPROPRIATIONS	359,254	271,819	315,537	367,188
24	ANNUAL INCREASE (DECREASE) IN CASH [1/]	-	-	-	-
25	PLANNED NET REVENUE FOR RISK	-	-	-	-
26	TOTAL ANNUAL INCREASE (DECREASE) IN CASH	-	-	-	-

1/ Line 24 must be greater than or equal to zero, otherwise net revenues will be added so that there are no negative cash flows for the year.

Preliminary Segmented Revenue Requirement*

		A	B	C	D	E	F	G	H
	2016 SEGMENTED REVENUE REQUIREMENT	**TOTAL**	**GENERATION INTEGRATION**	**NETWORK**	**SOUTHERN INTERTIE**	**EASTERN INTERTIE**	**UTILITY DELIVERY**	**DSI DELIVERY**	**ANCILLARY SERVICES**
1	OPERATIONS & MAINTENANCE	445,236	7,133	270,388	39,380	1,610	4,210	2,750	119,764
2	TRANS ACQUISITION AND ANCILLARY SERVICES	142,694	301	20,159	2,060	109	180	121	119,762
3	DEPRECIATION	233,545	2,845	170,367	24,546	2,917	1,330	1,006	30,535
4	NET INTEREST EXPENSE	165,520	1,998	140,188	15,337	2,883	803	684	3,627
5	PLANNED NET REVENUES	108,865	1,034	89,674	14,021	1,491	415	354	1,876
6	TOTAL TRANSMISSION REVENUE REQUIREMENT	1,095,859	13,310	690,777	95,344	9,011	6,939	4,915	275,563
	2017 SEGMENTED REVENUE REQUIREMENT								
7	OPERATIONS & MAINTENANCE	454,692	7,282	276,042	40,203	1,644	4,298	2,808	122,415
8	TRANS ACQUISITION AND ANCILLARY SERVICES	148,971	297	20,148	2,079	104	179	120	126,044
9	DEPRECIATION	250,423	3,011	181,329	28,191	2,940	1,399	1,046	32,506
10	NET INTEREST EXPENSE	179,568	1,959	151,905	17,254	2,822	807	671	4,149
11	PLANNED NET REVENUES	86,192	800	68,287	13,654	1,153	330	274	1,694
12	TOTAL TRANSMISSION REVENUE REQUIREMENT	1,119,845	13,349	697,711	101,382	8,662	7,013	4,920	286,808

**The segmented revenue requirement does not reflect the segmentation proposal.*

BP-14 Segmented Revenue Requirement Error

- In July 2014, Staff discovered that the BP-14 segmented revenue requirement mistakenly used the three-year average historical O&M allocators from the BP-12 rate case rather than the O&M allocators from the BP-14 rate case. This resulted in a misallocation of costs between the segments. The effect on the segmented revenue requirement is displayed below.

		A	B	C	D	E	F	G	H
			Generation		Southern	Eastern	Utility	DSI	
	($000s)	Total	Integration	Network	Intertie	Intertie	Delivery	Delivery	SCD
1	Corrected	910,410	12,159	644,177	100,050	8,883	7,145	4,345	133,651
2	Published	910,410	9,655	653,431	94,088	9,920	6,281	3,384	133,651
3	Difference	-	(2,504)	9,255	(5,963)	1,038	(864)	(962)	-

- This is purely a problem of cost allocation and not one of cost recovery.
- At this time, we are not assuming either corrections to BP-14 rates or adjustments to future BP-16 rates. This approach is open to discussion.
- Please submit comments to Rebecca Fredrickson and Ray Bliven with “BP-14 Error” in the subject line by August 20th. This will allow staff sufficient time to consider your input and provide an update at a September pre-rate case workshop.

Effect on BP-14 Rates

	A	B	C	D	E
	Product/Service	**BP-12 Rate**	**BP-14 Published**	**BP-14 Corrected**	**% Δ BP-14 Corrected From BP-14 Published**
1	NT – Network Transmission	1.665	1.741	1.717	-1.4%
2	PTP – Point-to-Point	1.298	1.479	1.459	-1.4%
3	IR – Integration of Resources	1.498	1.736	1.721	-0.9%
4	FPT – Formula Power Trans.	1.418	1.666	1.652	-0.8%
5	IS – Southern Intertie	1.293	1.128	1.208	7.1%
6	SCD NT	0.203	0.300	0.300	0%
7	SCD PTP	0.203	0.257	0.257	0%
8	NT + SCD	1.868	2.041	2.017	-1.2%
9	PTP + SCD	1.501	1.736	1.716	-1.2%
10	IS + SCD	1.496	1.385	1.465	5.8%

Cost Allocation

Cost Allocation

- Please see Tacoma's presentation.
- Please send comments of Cost Allocation proposal to the techforum@bpa.gov with the title "Cost Allocation"

Transalta Discussion
On the Southern Intertie Issue

Southern Intertie
Long Term Firm Value

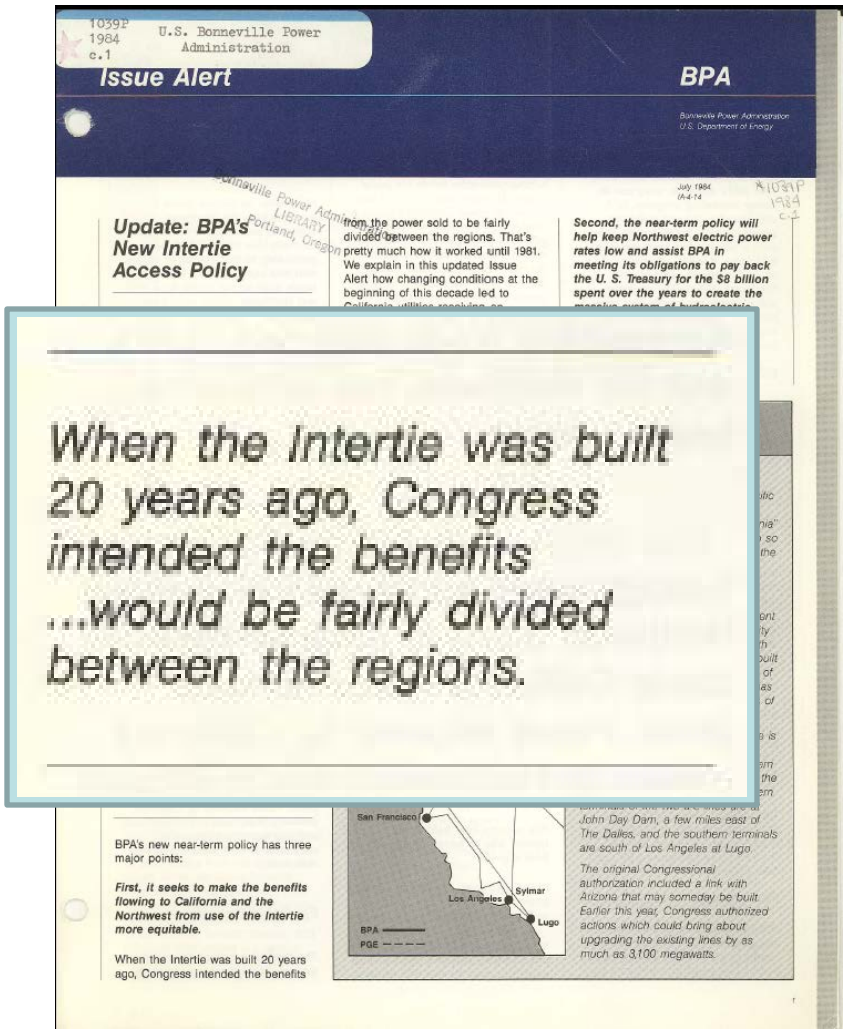
Background

- This presentation is in response to BPA TX customers' desire to talk about the value of Southern Intertie (IS) Long Term Firm (LTF).
- It focuses on BPA's analysis of whether or not the value of IS LTF has decreased and possible causes.
- It does not assume solutions, either through rates or business practice changes.

BPA recognize this is a complex issue
that affects individual stakeholders differently

Intertie Value Discussion

- Two Value Concerns:
  - Do Southern Intertie Long Term Firm rights holders compete against others during preschedule?
  - Does competition affect the value of holding LTF rights?



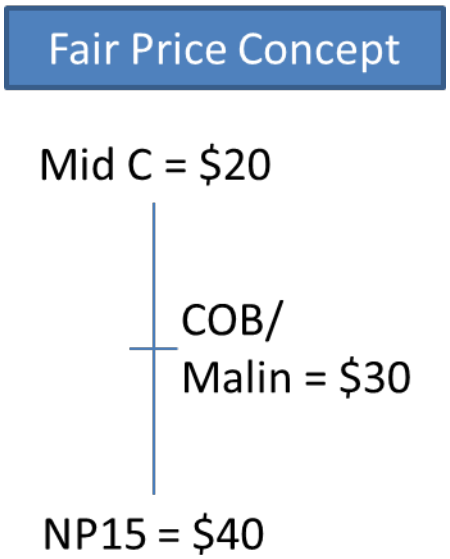
Summary

- The **logical argument is sound** that under current business practices there is little value in holding LTF when bidding into CAISO's Day Ahead (DA) Market.
- BPA analysis indicates **market data is consistent** with the claim that the value of LTF has diminished since CAISO removed their day ahead tagging requirement.
- However, these concerns focus on the value of LTF only when bidding into the CAISO DA Market and **there are other uses of firm transmission that continue to hold value**.

This analysis focuses on the
Value of BPA LTF in CAISO DA Market

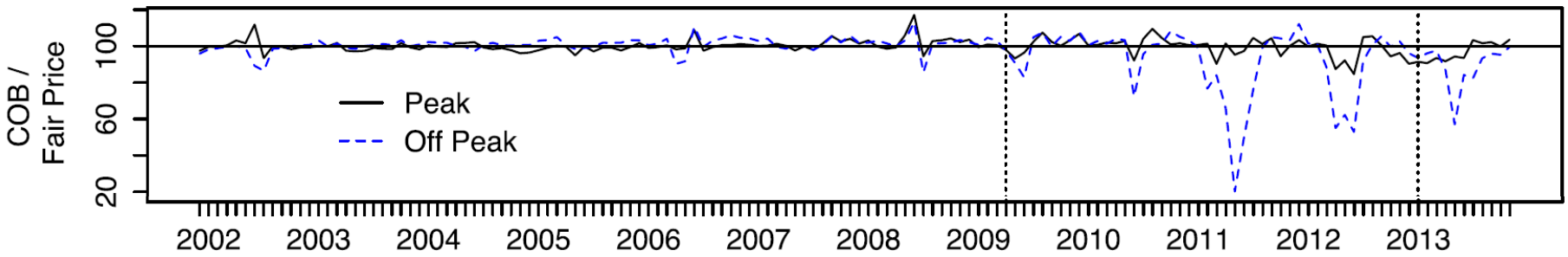
Background

- Starting in 2009, BPA analyzed the impacts of CAISO's Market Redesign Technology Upgrade (MRTU) in response to customer comments
- BPA's analysis found that by no longer requiring e-tags for day ahead schedules, CA parties could ***THEORETICALLY*** capture a larger portion of the Mid-C to NP-15/SP-15 spreads
- BPA's ***QUANTITATIVE*** analysis from 2010-2011 showed no evidence of a significant shift from a theoretical "Fair Price"



Current Concerns

- In October 2013, a TX customer requested that BPA update our analysis
- A cross agency team found evidence that **prices at COB now deviate significantly** from the theoretical "fair price"



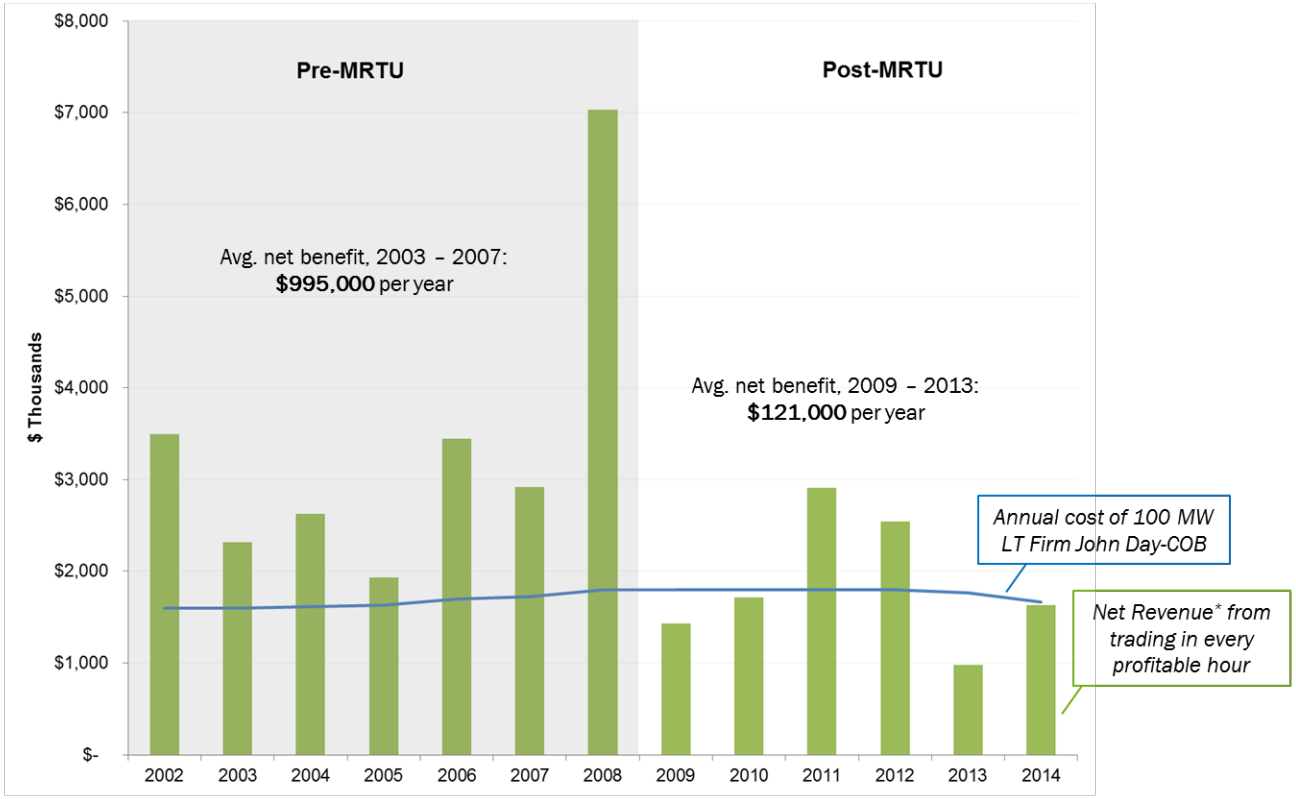
- The analysis is complicated by
  - water conditions, especially in 2011 and 2012,
  - market changes within CA, including convergence bidding in 2011 and carbon pricing in 2013.

Customer Perspective

- FTI Consulting considered the value proposition of buying LTF for CAISO's DA Market

Customer Perspective

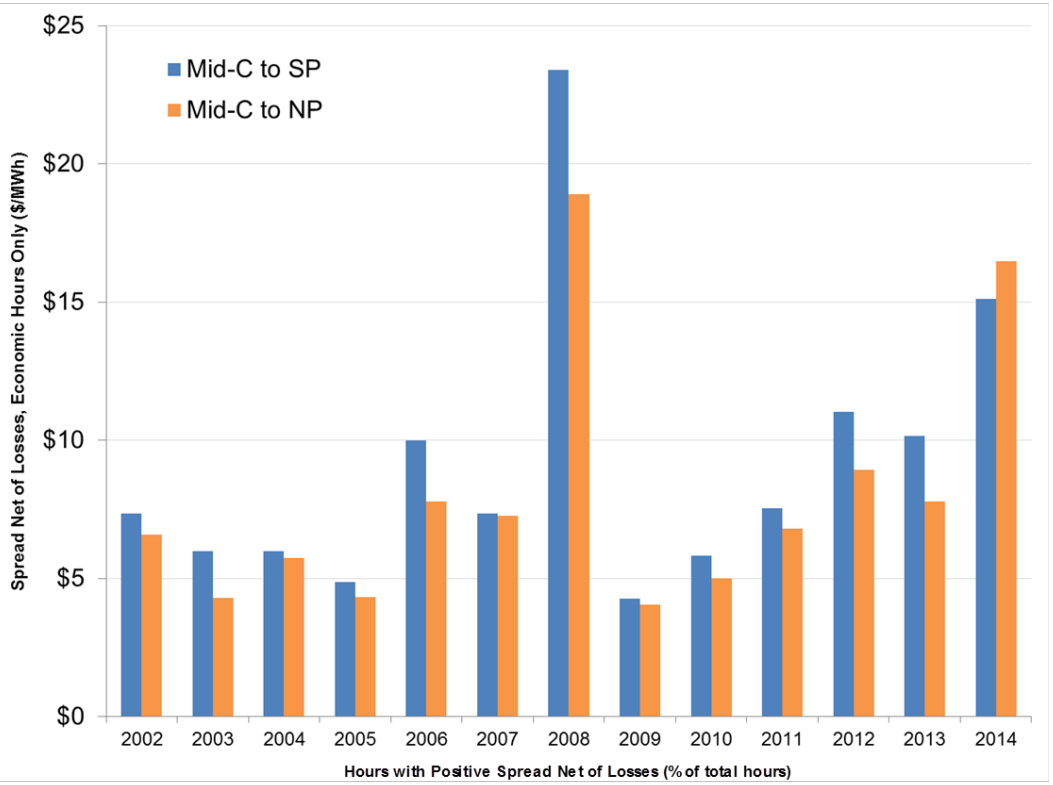
Trading Revenue vs. Cost of Long-Term PTP
100 MW Mid-C to NP15



* *Analysis assumes no incremental NW wheel or losses (i.e., would incur and NW wheel and losses anyway to sell power at Mid-C)*

Customer Perspective

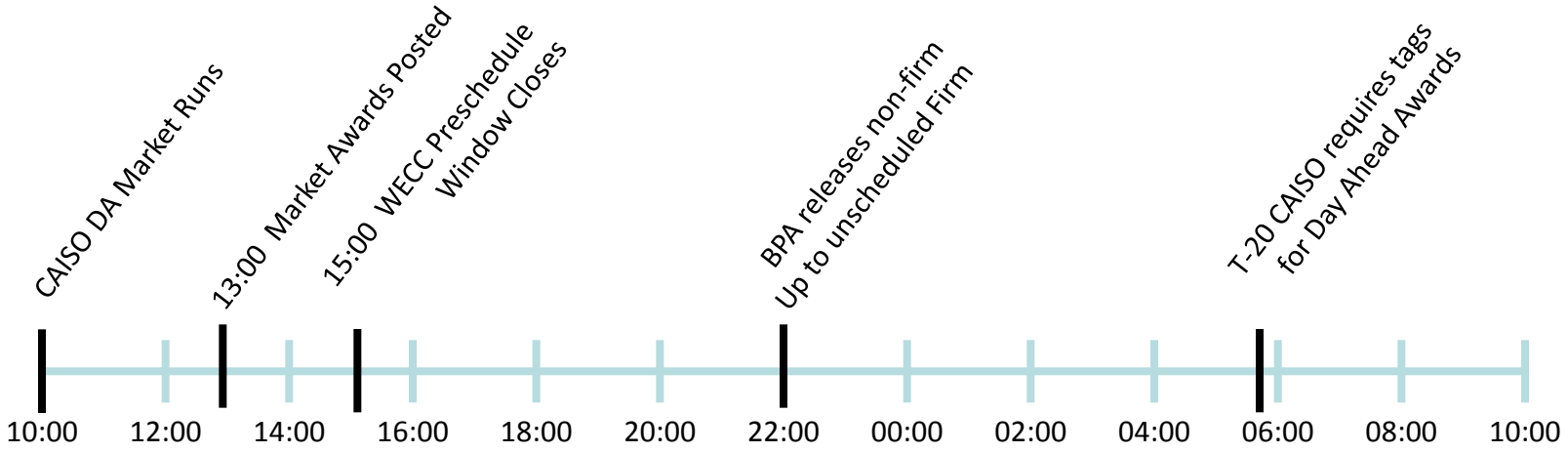
Economic Price Spreads are Observed in the Majority of Hours



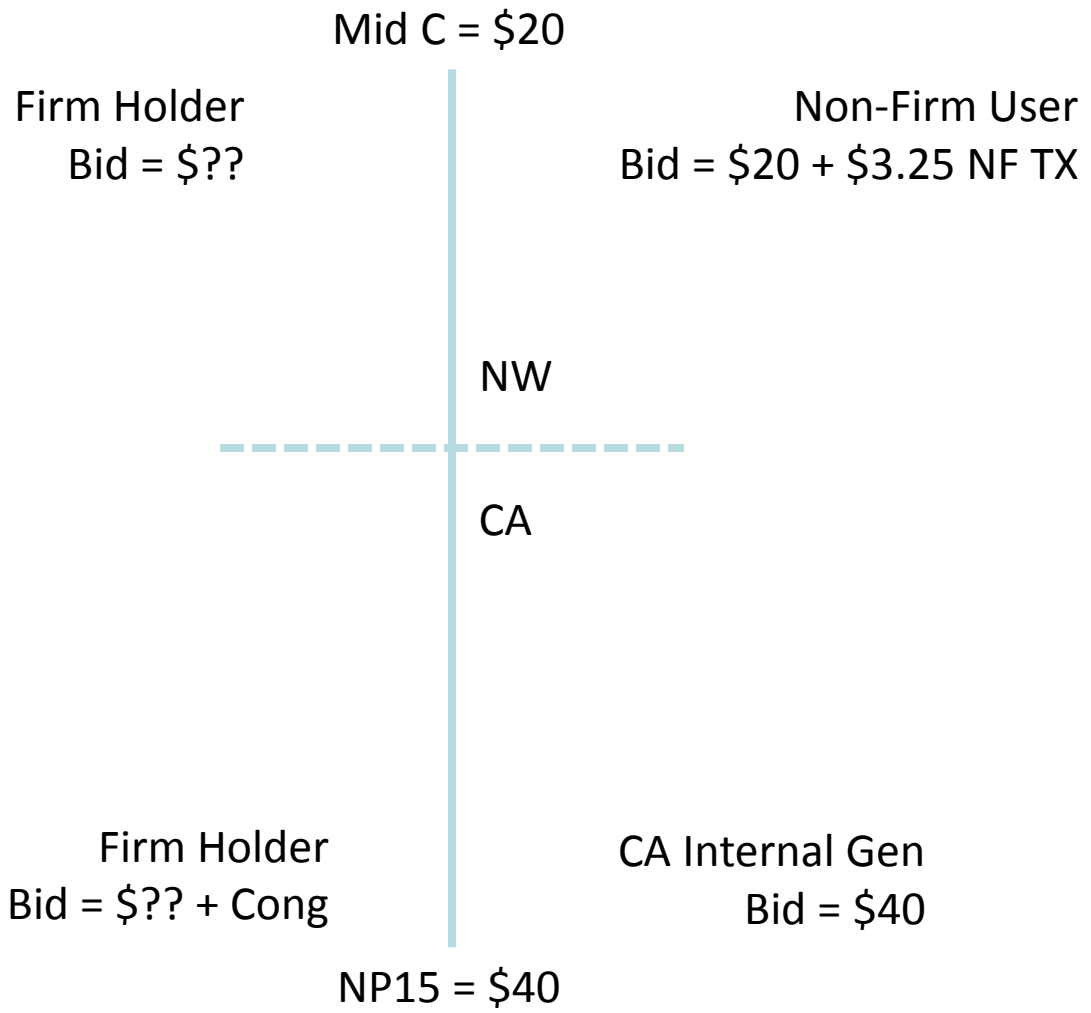
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Mid-C/SP	64%	58%	55%	45%	52%	45%	37%	34%	34%	68%	79%	80%	83%
Mid-C/NP	76%	71%	67%	56%	59%	58%	53%	47%	51%	72%	84%	84%	87%

Current LTF Value Concerns

Do LTF and HNF compete?



Does competition affect value?



Request for Comments

- The value of Southern Intertie LTF has diminished for the specific use of bidding into CAISO's DA Market.
- **BPA desires stakeholder input** on if and how it should change its TX rates or its OATT/business practices to remedy this shift in value. Please submit your comments to techforum@bpa.gov with the title "Value of the Southern Intertie," by August 20, 2014.

BP-16 Workshop Schedule

Date	Topic
August 13 **August 14**	Transmission Rates Power Rates
August 27	IPR, CIR, Rates and Reserves Workshop

Next Steps

- August 27 – Rates Workshop
  - Transmission Rates Model
  - Cost allocation
  - Follow up on Intertie Rate Design for LT and ST
  - Follow up on the WECC/PEAK costs
  - Wrap of Pre-Rates topics